

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

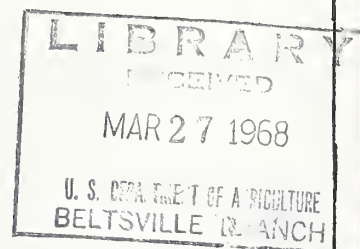
FOREIGN AGRICULTURE

A281.9
F76P0.

March 25, 1968

FUTURE OF WOOL

NEW DIRECTIONS IN
WORLD AGRICULTURE



Foreign
Agricultural
Service
U.S. DEPARTMENT
OF AGRICULTURE

In this issue:

2 A Contracting Market Threatens the Future of Wool

6 Selling in Japan—Different but Challenging

7 Japan Drops Test on U.S. Poultry

8 New Directions Seen for World Agriculture

11 India Moves Closer to Peak Foodgrain Crop

12 Secretary Freeman To Head Trade Mission To Top Asian Dollar Markets

13 Crops and Markets Shorts

16 Independence for Mauritius, Indian Ocean Sugar Isle

This week's cover:

People—how fast they are multiplying and who will feed them is discussed in an article on page 8.

Orville L. Freeman, Secretary of Agriculture
Dorothy H. Jacobson, Assistant Secretary for International Affairs
Raymond A. Ioanes, Administrator, Foreign Agricultural Service

Editorial Staff:

Editor: Alice Fray Nelson; Associate Editors: Janet F. Beal and Elma E. Van Horn; Assistant Editors: Beverly J. Horsley, Faith N. Payne, Mary A. Nicolini, Marcia Sutherland, Mary C. LaBarre.

Advisory Board:

W. A. Minor, Chairman; Horace J. Davis, Anthony R. DeFelice, Kenneth K. Krogh, Robert O. Link, Kenneth W. Olson, George A. Parks, Donald M. Rubel, Dorothy R. Rush, Raymond E. Vickery, Quentin M. West.

Use of funds for printing *Foreign Agriculture* has been approved by the Director of the Bureau of the Budget (June 15, 1964). Yearly subscription rate, \$7.00 domestic, \$9.25 foreign; single copies 20 cents. Order from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Contents of this magazine may be reprinted freely. Use of commercial and trade names does not imply approval or constitute endorsement by USDA or Foreign Agricultural Service.

A Contracting Market Threatens the Future of Wool

By LARRY PANASUK
Livestock and Meat Products Division, FAS

Wool producers throughout the world are concerned with the uncertainty now existing in their industry—specifically, in the future of wool as a textile fiber. A year and a half ago there appeared to be a shortage of wool; today there is too much. This does not reflect a sudden surge in the world wool production because there has been none, although world supplies did rise slightly to a new record in 1967. Why then the weakening demand and falling prices for wool?

The problem is twofold: First, manmade fibers—still in a production boom—have further eroded wool's share of the fiber market; secondly, credit restraints and economic restrictions in most consuming countries have made it more difficult to purchase quality woolen garments. At the same time, there has been a general acceptance of fine wools but a strong rejection of the coarser types, owing to the mounting competition from manmade fibers for use in carpets and other home furnishings. These latter types account for over one-fifth of total wool output and provide the backbone of at least one economy, New Zealand, which is now in the midst of an economic recession brought on largely by the slow demand for its wool.

*Market booms in early
1966, only to be turned off
by textile recessions.*

The wool industry has a history of wide and abrupt market fluctuations, with producers never knowing for sure when a good market will turn suddenly into a bad one. A case in point was 1966.

During the first half of that year, competition from manmade fibers, which has for long threatened wool, was pushed into the background, as Japan, France, Italy, and West Germany all expanded their wool consumption. With gains like the 13-percent jump to a new record in Japan, these nations were able to make up for declines in use by the major consumers—the United States and the United Kingdom—and to keep full-year consumption of wool up 2-1/2 percent from 1965.

By the middle of 1966, however, the tables had begun to turn for wool, as setbacks in many of the leading textile industries forced reductions in fiber consumption. From then on the trend

was down, with lowered use of carpet wools, particularly in the United States, the prime factor in this turnaround.

Today, the anticipated losses to manmade fibers have materialized. Manufacturers and consumers of all natural fibers have been and will continue to be under heavy pressure from the less-expensive easy-care synthetic fiber products. In fact, production of these fibers now equals the world wool clip in clean weight, with supplies—particularly of the polyamide and polyester fibers—in excess. Consumption of manmade fibers was up to 22 percent of total fiber usage in 1966 from 21 and 16 percent in 1965 and 1963, respectively, posing for wool its greatest single challenge.

One obvious result of the slowdown in demand for wool has been a drop in world wool trade.

Data for 1967 show a marked decline in total shipments from the top five exporting countries—Australia, New Zealand, Argentina, Uruguay, and South Africa—which together account for 84 percent of this trade. Hurt the most are the coarse wool exporters New Zealand and Argentina, whose shipments in 1967 were off 27 and 21 percent, respectively, from the previous year. Largest exporter, Australia, recorded a gain of 6 percent, while South Africa and Uruguay had declines of 13 and 1 percent.

Among the top importers of this wool is the United States, which over the long term has steadily increased purchases as its own wool clip has declined. Currently, about 60 percent of total wool consumed in the United States is imported, with all wool used in the manufacture of carpets and rugs purchased abroad. Reflecting the lowered demand for these coarse wools—as well as for apparel wool—imports by the United States in 1967 were off 32 percent from the relatively high level of 1966.

Other major consumers also imported less wool. Japan, the No. 1 importer, took 6 percent less in January-September 1967 than in the same period of 1966; and imports by France during

January-September 1967 were off 24 percent, the Netherlands 25 percent, and West Germany 30 percent.

*World wool output hits record,
with giant producers—Australia,
New Zealand—showing gains.*

A look at the production picture shows as yet little response to the slackening of demand for wool. In fact, world wool production has inched steadily upward over the past six seasons, hitting a record in 1966-67 and again in 1967-68.

The major factor determining the supply of wool is the number of sheep on hand. As of January 1, 1967, world sheep numbers were estimated at a record 1,027 million head, 1 percent above the 1966 level. Wool followed the livestock gain, and in 1967-68 world supplies of this product hit a record of nearly 6 billion pounds, greasy basis—1 percent above the previous record of 1966. (This includes wool produced during calendar 1967 in most Northern Hemisphere countries and during the year beginning July 1 or October 1, 1967, in Southern Hemisphere countries.)

Of the total production, Merino or fine wools account for 40 percent; crossbred or medium wools, another 40 percent; and coarse or long (carpet) wools, 20 percent. This breakdown has changed little in recent years despite shifts in demand away from the coarser wools. The average in 1956-60, for instance, showed Merino wools accounting for 41 percent of production; crossbreds, 37 percent; and coarse wools, 22 percent.

The greatest share of this total clip is produced in the Southern

Mustering sheep in New Zealand—one of the countries burdened with too much wool.



Hemisphere. Here are located five of the major producing and exporting countries—Australia, New Zealand, Argentina, Uruguay, and South Africa. Together, these countries account for about 60 percent of the world supply of wool, with Australia producing 30 percent, New Zealand 12, Argentina 8, South Africa 6, and Uruguay 3. Major Northern Hemisphere producing countries include the USSR with 14 percent and the United States and the United Kingdom with 4 and 2 percent, respectively.

Australia, accounting for two-thirds of world Merino wool production, has estimated production for the 1967-68 season at 1,770 million pounds (comprised of shorn, pulled, and wool exported on skins). Favorable weather in Australia has made possible a gradual recovery in sheep numbers from the greatly reduced level of 1965, a year of extensive drought. In fact, the recovery has been better than had been expected, owing to continued demand for sheep for restocking purposes and a reduced mortality rate of lambs in 1966 and 1967.

Wool production in New Zealand, has been estimated at 735 million pounds during the current season, up 4 percent from 1966-67. This record production stems from expanded sheep numbers—the largest in New Zealand's history. The upward trend in wool output probably has been coincidental with efforts to fulfill goals of the Agricultural Conference of 1964, which called for expanded livestock production. In subsequent years, the New Zealand Government encouraged producers to build up flocks through farm development by means of tax concessions. In addition, farmers were allowed to postpone payment of taxes on the annual increase in livestock numbers until the time the animals were sold.

This government-encouraged buildup has turned into a giant-sized headache for New Zealand, whose production is about 80 percent coarse wool. Lack of demand for such wool put the market into a crisis last year, when prices plummeted and the New Zealand Wool Commission was forced to make substantial purchases in order to maintain a floor price. And even the floor price has been forced down—from 28 U.S. cents to 18.5 cents—because of limited funds. Producers in New Zealand receive a deficiency payment from an industry fund, which makes up the difference between the realized auction price and the old 28-cent floor price (the guaranteed price). This new deficiency payment program allows more wool to move in trade and earn more foreign exchange; also, it reduces Commission purchases. However, the industry fund is rapidly being depleted. Provisional arrangements have been completed to augment the Commission's funds through low-interest-rate government loans.

*Lack of demand, hard luck
hit South American producers, but
South African output recovers.*

In Argentina, wool production continues to be disappointing, with the 1967-68 estimate set at 461 million pounds or 1 percent below the previous season's. The decline is attributed to lower production of coarse wools. Producers' enthusiasm for the marketing prospects of coarse wools, which approximate one-fourth of total Argentine production, has declined because of the low prices received for these types since mid-1966. Output of fine wools and medium crossbreds, on the other hand, is expected to increase moderately during the 1967-68 season.

Wool production in Uruguay, the other major wool producer in South America, has also taken a drop, falling 6 percent to an estimated 179 million pounds. Adverse weather conditions throughout the year reduced feed supplies; large numbers of sheep were lost during the floods in June and July; and others died because of their poor condition and overexposure during the record-cold nights that followed the floods. Increased sheep slaughter for meat because of a government prohibition against cattle slaughter also contributed to reduced numbers. Unlike the other main South American producer, Argentina, Uruguay produces mainly crossbred fine wool and no carpet wool.

South Africa, by contrast, had an unexpected recovery in wool production. The 1967-68 estimate of 335 million pounds is 5 percent above that for the previous season. This has resulted partly from improved management practices on African sheep farms, particularly in grazing and breeding practices.

In the United States, wool production fell for the seventh consecutive year, dropping 3 percent below the 1966-67 level. Sheep numbers on U.S. farms and ranches as of January 1, 1968, totaled 22.1 million head, down 7 percent from the previous year to the lowest level since data compilation was begun for wool in 1867.

The USSR is the only major wool producing country in the Northern Hemisphere to report a significant rise in wool production. This has resulted because of increasing sheep numbers, spurred by new government goals and objectives for increased production in the socialized sector. Livestock production in the private sector of the economy has likewise risen because of recent government liberalization of private livestock raising.

Among other producing countries, India recorded an increase of 4 percent in production; Romania and Yugoslavia, 5 percent each; and Italy, 6 percent. Decreases in production were reported ranging from 3 percent in Mexico to 33 percent in Japan. Canadian output of wool was off 8 percent.

*World stocks are the
highest since 1949-50, and
prices are off sharply.*

The failure of production to respond to slackened demand for wool is mirrored in a worldwide buildup of wool stocks. At the beginning of the 1967-68 season, carryover stocks of raw wool in producing countries were estimated at 320 million pounds, clean basis, more than three times the previous season's and the highest since 1949-50. Well over 85 percent of these stocks were crossbred and carpet wool—the coarse wools. Total carryover of fine wools, located primarily in Australia, was estimated to be only slightly higher than that of a year earlier.

Stocks in each of the five major producing countries were up from the previous season. The New Zealand Wool Commission held substantial quantities of medium and coarse crossbred wools. And even in Argentina and Uruguay, where the 1967-68 clip was smaller, stocks were up because of smaller exports.

Fluctuations in raw wool prices are caused primarily by changes in demand rather than in supply, so with the textile-industry recession after mid-1966, world wool prices fell sharply. A further decline was recorded in 1967, with the drop much greater for lower quality wools. Since the beginning of the current season, world prices have been steady to higher for the fine wools. But

coarse wool prices are doing well to remain steady and still tend to move in the buyer's favor.

Some recovery in mill use may occur in 1968 and thereby cause price strengthening. But with increased supplies from larger production and inventory stocks, world wool prices in 1968 are expected to continue at relatively low levels.

In the United States, the national average price received by growers for shorn wool in 1968 probably will run close to the 42 cents a pound, greasy basis, recorded in 1967. Because of rising consumer incomes and relatively low wool prices, mill use of raw apparel wool may increase, but prices of domestic wool probably will move with the anticipated low prices of imported wools. Competition from manmade fibers will continue to moderate increases in wool use.

*Some results foreseen from
research and promotion but out-
look for future still uncertain.*

As with most products, demand for wool and sheep in the future could go either way. The two products that must be marketed in the sheep business, wool and meat, both have been experiencing declining consumption—a trend that will not easily be reversed. Some analysts, on the other hand, point out that there definitely is a future for this industry. They explain that as the demand for food increases worldwide, the demand for lamb may rise, especially since sheep can be raised on low-cost rations. Moreover, ways are increasingly being sought to enhance wool's unique qualities and add to them through research—changes that could make wool more competitive with the man-made fibers.

The negative side of the outlook is most apparent in the United States. Considering the steady downward trend in sheep and wool production over the past 25 years, it is rather difficult to become enthusiastic about the long-run future of this country's industry. The ever-changing structure of our agricultural economy and rising production costs are forcing our farmers and ranchers to seek more efficient use of their land and other resources. The advantages inherent in sheep and lamb production as opposed to cattle production appear, in the long run, to be more than outweighed by the many disadvantages.

On a worldwide basis, increasing wool production will occur should sheep numbers continue to expand. Most producer nations realize that gains here are necessary to aid in maintaining wool's position in the world textile industry. But at the same time, huge stocks and low prices such as now prevail tend to discourage these producers and prompt shifts from wool to other products.

In coping with the current situation, producers or institutional organizations can temporarily withhold wool from the market. Also, sheep can be withheld from shearing, and—as an extreme and expensive measure—they can be slaughtered for meat to reduce numbers. These actions, however, are costly to the producers and if not followed by positive action could accelerate the shift away from wool to other products.

Concerning the relative output of the various grades of wool, improved breeding could produce more of the finer wools for which there is a strong and growing demand. However, there are limits to this. For example, approximately 70 percent of New

Zealand's sheep are Romneys, which yield the less popular coarse grades of wool, but the climate in New Zealand prohibits any significant increase in sheep producing finer wools.

On the brighter side is the growing effort by the industry to enhance wool's image and to discover, through research, ways to improve its performance.

Spearheading this effort is the International Wool Secretariat (IWS)—a promotional organization made up of the major wool producers. The IWS has set itself to the task of strengthening the demand for wool, crossbred wool in particular, as economic conditions improve around the world. Its wool trademark—Woolmark—is today a well-established guarantee of apparel and other consumer goods made from fine-quality wool.

Many countries have also stepped up their wool research programs.

In February a year ago New Zealand opened up the Wool Research Organization laboratories—the world's first research center to concentrate primarily on crossbred wools. New methods in washing and scouring wool by machine have been receiving much attention here.

Australia has been experimenting with ways to produce more wool per sheep. Scientists have found that the interjection of a milk protein casein into the fourth stomach of the sheep will more than double wool production per sheep. (Australian production currently averages about 10 pounds per sheep.) Australia is also experimenting with better and cheaper ways to handle and pack wool.

In the United States, a new carpet dyeing process has been developed which produces two colors in wool carpets in a single operation. This will enhance the movement of coarse wool used in carpet manufacture by increasing the color selection in wool carpets and reducing the retail price.

*Groups in Australia, Cali-
fornia choose wool over other fibers
because of its unique qualities.*

Wool does possess unique qualities. In a radical departure from tradition, a hospital in New South Wales, Australia, has furnished its new children's ward with pure new wool—carpets, curtains, drapes, blankets, nursing sheepskins, and other woollen products. Why wool? because of its ability to control the spread of bacteria, its insulating properties, its nonflammability properties, as well as its comfort and ability to create an environment favorable for speedy recovery.

Also opting for wool is the Bay Area Rapid Transit District of San Francisco. After more than a year of testing the quality of wool and nylon carpets in subway cars in Toronto, Canada, the San Francisco agency has decided to use wool carpeting for its new commuter trains.

This then is the mixed picture for wool. A product of unique properties and many more possibilities, wool is nevertheless creating headaches for its producers. Wool prices will eventually swing back up again, but will this be soon enough to keep producers from leaving the wool business and wool from losing further ground in the fiber market? Part of the answer lies in the ability of wool's promoters to come up with the high-quality easy-care products that today's consumers are demanding.

Exporters' eyes during the next few weeks will be on Japan, scene of a giant U.S. food exhibition. How they can better tap this large overseas farm market is told by Leon G. Mears, Assistant U.S. Agricultural Attaché, Tokyo.

Selling in Japan—Different but Challenging

In Japan, one often hears the phrase "Western influence" and sees its widespread impact every day. Yet most of the country's business is still conducted "Japanese style," in which personal loyalty and honor frequently outweigh impersonal business considerations.

The American coming to Japan often tries to keep a foot in both worlds of business, and he usually finds it does not work. But if he takes the time and trouble to adapt to the Japanese way of doing business he will no doubt find Japan a challenging and profitable market.

A proven market

One factor going for the exporter or potential exporter to Japan is the proven success of sales there. Probably no other single country currently offers as much opportunity to exporters of U.S. agricultural products as does this small island nation. Last year, it took a giant \$865 million of U.S. agricultural exports for the No. 1 spot among overseas markets and a seventh of the total farm export. Contributing to Japan's importance as a farm market is its rapid rate of economic expansion, which is unsurpassed in recent history and shows no signs of slowing down. Japanese consumers, with greater disposable incomes, are demanding the wider variety and higher quality foods normally associated with a rising level of affluence, and this means larger imports.

Moreover, Japan, with a lack of land and an extremely dense population, has just about reached the limit in expanding its own agricultural production.

This country's 1968 population of 101 million—half that of the United States—is compressed into an area smaller than California. The agricultural problem of too little land is further aggravated by thin, inherently infertile soils and rugged topography. In contrast to U.S. agriculture, where the technology adopted has been designed to conserve labor, the primary agricultural aim of land-scarce, labor-intensive Japan has been to increase yields. But now labor shortages are becoming common, causing farm labor costs to skyrocket and making Japanese agricultural production among the most costly in the world.

The government has been trying to compensate farmers for higher production costs by increasing farm commodity support prices year after year. This has resulted in a heavy drain on the federal budget and growing complaints from housewives who are confronted with spiraling prices in the marketplace. Furthermore, Japan's self-sufficiency rate in food production—now about 75 percent—continues to trend downward.

In view of these negative factors, the government is reviewing its agricultural production and trade policy, and a more liberal attitude toward imports is expected to be adopted in the not too distant future.

Tips on trading firms

The U.S. exporter, then, has the possibility of finding in Japan a market that is reliable and open to expansion.

A prerequisite for the exporter just getting into the market is to become acquainted with the Japanese trading firm—the tra-

ditional middleman in Japanese trade. Such firms were developed and live on the basis of rendering service. To accomplish this, they have recruited efficient salesmen, studied world trading conditions and patterns, and in many cases established offices staffed by well-trained personnel in the major trading countries.

As of January 1968, the number of these firms totaled 7,249, of which 7,106, or 98 percent of the total, were small-size enterprises with an average annual trade volume of less than \$13 million. These small firms, on the average, employ less than 10 workers and often have no more than 1 office.

Medium-size trading houses registering annual sales of between \$13 million and \$277 million currently number 131, or only 1.8 percent of the total. This group has an average of about 177 employees and 6 offices. According to the *Nihon Keizai Shimbun*—Japan's economic journal—these firms show the greatest interest in foreign transactions.

Only 12 companies, or 0.16 percent of the total, are the mammoth trading firms that chalk up annual sales of more than \$277 million. But these 12 firms account for about 49 percent of the total value of Japan's export-import transactions. Such enterprises—of which Mitsubishi Shoji, Mitsui & Co., Marubeni-lida, and C. Itoh are the largest—employ an average of 3,799 employees each and have 65 foreign offices.

Today, the trend in world trade seems to be moving toward direct contact between seller and buyer as sales volume grows. In Japan, however, the position of the trading firm is still dominant, and direct sales contacts, even for long-term purchases of raw materials, are the exception rather than the rule.

Trading firms of long-standing importance

The reasons for the dominance of the trading company in Japan's external trade are both historical and commercial.

Many of the large firms came into operation about 100 years ago when Japan suddenly opened its doors to the Western world. Some form of business institution was needed to deal with the American, British, and Dutch traders. As the volume of trade grew, the specialized trading firm came to act as an intermediary between the foreigner and the Japanese businessman, who generally was neither familiar with foreign business practices nor knew foreign languages.

Perhaps because of their traditional reliance on the trading firms, Japanese outlets have generally not developed adequate facilities and financial resources and are still frequently unable to accept large-scale shipments. Also, small companies sometimes break trade contracts inadvertently because of their lack of knowledge of international trade customs and procedures.

By contrast, Japanese trading firms, especially the medium and large ones, are well experienced in trading procedures throughout the world and have substantial financial resources. Moreover, since these firms believe in "big sales at low costs," their commissions are considerably lower than those of most foreign middlemen. On the average, they are below 10 percent and at times as low as 3 percent, depending on the volume of transactions. Because commissions are low, business through highly

experienced trading firms may prove more profitable than direct contacts with food processors and distributors.

The selection of the right firm to act as an agent in Japan is not easy. In most cases the choice is a trading company and often one with branch offices in the United States.

Various directories issued by the American Chamber of Commerce of Japan, the Japanese Ministry of International Trade and Industry, the Japan Chamber of Commerce and Industry, and the Japan External Trade Organization (JETRO) will come in handy in locating trading firms. A letter or phone call to one of the below listed JETRO U.S. branch offices is generally a productive first step. The U.S. Departments of Agriculture and Commerce and the American Embassy in Tokyo can also assist.

U.S. BRANCH OFFICES OF

JAPAN EXTERNAL TRADE ORGANIZATION (JETRO)

Japan Trade Center	Japan Trade Center
393 Fifth Avenue	Suite No. 401-406
New York, N.Y. 10016	12 Geary Street
LE2-7191	San Francisco, California 94108
	DO2-0915

Japan Trade Center
232 North Michigan Avenue
Chicago, Illinois 60601
RA6-4390

Japan Trade Center
Suite 327 Roosevelt Bldg.
727 West Seventh Street
Los Angeles, California 90017
625-0731

Japan Trade Center
330 International Trade Mart
2 Canal Street
New Orleans, Louisiana 70130
525-8266

Japan External Trade
Organization
1867 Atlantic Avenue, Room K
Long Beach, California 90806
591-5223

Japan External Trade Organi-
zation
1827 First National Bank Bldg.
Dallas, Texas 75202
RI7-7339

Japanese trading experts say a detailed introduction of one's firm is indispensable in writing to a Japanese trading company for the first time. If a letter of inquiry contains detailed information about the inquirer's business scale, the products he desires to export, standing in the industry, and other relevant information, it will go a long way toward assuring the Japanese firm of the inquirer's responsibility. Such information is particularly important when foreign inquirers seek agent agreements with Japanese trading companies.

Processing, distribution of foods

U.S. agricultural exporters who choose Japan as a market find the food processing and distribution systems quite different from those in the United States.

Food processing in Japan, although a growth industry, is still done largely by small, often inefficient, "cottage type" firms. There are almost 100,000 manufacturers of food and related products in Japan—1 for each 1,000 people. But only about 50 of these have more than 1,000 employees, while some 1,000 plants have more than 100 workers and another 60,000 have only 1-3 employees. For a long time, a surplus of labor served to perpetuate this system's inefficiency. But today labor shortages in other industries are attracting workers away speeding modernization.

Generally, Western-type foods are processed in the larger and more modern food-processing operations, and expansion in this field is expected to gain momentum in the near future. The baking

industry, for instance, has grown at a spectacular rate during the last decade and now boasts many big, efficient shops.

Food distribution, although showing considerable "Western influence," also follows largely the traditional pattern—that of layered wholesaling and "mama-papa" type small-store retailing.

Several well-financed manufacturers, mostly producers of Western-type foods, have established their own delivery networks. Also, a few of the larger supermarkets are now allowed to buy produce directly at wholesaler auctions, and some primary wholesalers now sell directly to selected retail outlets. However, the bulk of the food business follows the old system whereby a primary wholesaler generally sells to the secondary wholesaler who in turn sometimes deals with a tertiary wholesaler before the retailer enters the picture.

The number of supermarkets, nevertheless, has been growing rapidly, and currently there are about 2,500 of this type of retail outlet in Japan, mostly in the Tokyo-Osaka metropolitan areas. (Supermarkets in Japan are defined as retail stores handling mainly food products and having annual gross sales exceeding 100 million yen—about \$277,777.) In contrast, there are about 670,000 small retail food and beverage stores. It is not unusual to find a supermarket completely surrounded by small "mama-papa" type fish stores, bakery shops, fruit stores, vegetable stores, meat shops, and beverage stores.

As can be seen, Japan is an interesting mixture of the old and new, and it continues to be among the most promising of overseas markets for U.S. farm products. But doing business "Japanese style" must be understood. As one U.S. businessman in Tokyo recently put it: "Japanese business institutions and values are much different than ours. For example, I learned the hard way that loss of face over a real or fancied insult during a transaction can disrupt a relationship for hours, days, or a lifetime.

Japan Drops Test on U.S. Poultry

Since March 1, Japan has been admitting U.S. poultry under normal customs procedures without special testing for Newcastle disease. For some time USDA has been trying to gain relaxation of Japanese Government test restrictions against imports of frozen U.S. poultry.

The Japanese Government originally announced in August 1967 a sanitary certification requirement that would have had the effect of banning U.S. frozen poultry imports completely. Quick action by the Agricultural Attaché, working jointly with two USDA veterinarians and the cooperator, prevented the interruption of poultry exports to our third largest poultry export market.

The two USDA veterinarians were flown to Japan to join the Agricultural Attaché in consultations with Japanese officials. These consultations resulted in the joint signing of a test of understanding by the director of the Japanese Bureau of Animal Industry and Forestry and the U.S. Agricultural Attaché. The agreement prevented the imposition of import restrictions in Japan, which would have seriously interfered with imports of poultry. However, as of the effective date, U.S. poultry was subject to Newcastle inspection testing procedures which required longer periods of time for port clearance.

The Department worked with Japanese officials on a solution to the problem, including an on-the-spot evaluation by the Japanese of this country's poultry inspection system. This work, plus the fact that no disease was found in U.S. imports, has now resulted in complete lifting of the test restriction. Japan is a sizable market for U.S. poultry and has considerable potential for expansion. U.S. exports of chicken and other poultry to the Japanese market totaled about 10 million pounds in 1967.

Good news on current progress toward reaching a worldwide equation between numbers of people and food supplies is here reported by Lester R. Brown, Administrator of IADS.

New Directions Seen for World Agriculture

The opening weeks of 1968 have been characterized by uncommonly bleak headlines, ranging from the stringent measures announced early in January to improve our international balance of payments to the recent step-up in the conflict in Vietnam. But there is some exceedingly good news elsewhere, and much of it is being eclipsed by the bad.

The good news is that we are on the threshold of an agricultural revolution in many of the hungry, densely populated countries of the less developed world, particularly in Asia. Further, we are witnessing some advances in food technology which, if commercially feasible, can make quality diets available to millions at much lower costs.

At the top, one senses a new political commitment by Asian governments to respond to the demand by farmers for incentive prices and the range of inputs needed to modernize agriculture. The dramatic, new, high-yielding varieties of foodgrains are being disseminated more rapidly among farmers in some countries than had either been planned or anticipated. Further, the yield performance of these varieties is proving much more transferable from experimental plots to field growing conditions than was thought possible.

However, despite the progress reported and prospects cited in this report the food-population problem is not close to being solved. It is far from solution. But the present dynamic agricultural climate makes Asia today far more receptive to U.S. assistance policies in this field, to agricultural technical assistance programs, and to sound private agribusiness investments than was the Asia of, say, 2 years ago.

The food-population problem will not be satisfactorily solved until population growth is effectively slowed and eventually stabilized. The agricultural revolution which seems to be in the making will, if it continues, contribute to a solution by buying additional time for countries to mount effective family planning programs.

Past record not bright

The food production record of the less developed countries from the beginning of this decade through 1966 is not an encouraging one. Food production, scarcely able to keep pace with population growth, not to mention additional demand generated by rising incomes, fell behind overall demand. The result for country after country was either rising imports, rising food prices, or some combination of the two. However, preliminary crop reports for 1967 in the developing countries indicate food output per person gained 6 percent over last year's drought-depressed levels, bringing production per person back to the levels of the early 1960's.

The beginning agricultural revolution is most evident where it is most needed, in Asia, a region containing 56 percent of the world's people. It extends from Turkey to the Philippines, and includes the pivotal countries of India and Pakistan. Together,

these four countries alone contain over 700 million people, or about half the population of the less developed world excluding China.

Recent progress traces to several factors including a growing emphasis by governments in these countries on agricultural development, and a willingness to allocate scarce resources to this goal. Several factors underlie this growing emphasis: (1) the disappearance of world surpluses of wheat and rice, (2) the movement toward harder terms on U.S. concessional food shipments, and (3) a growing insistence by our government—in USDA, AID, and the Congress—that food aid recipient countries make an adequate effort to develop their own food producing resources.

We have increasingly used food aid as a source of leverage to encourage more rapid growth in the food output of developing countries. When a country requests commodities from us, we analyze its agricultural development effort and identify shortcomings. We then seek commitments to remedy them. We may ask a country to build farm-to-market roads, to increase the share of its budget resources going to agriculture, to improve its climate for foreign agribusiness investment, or to undertake any of a host of other needed actions. Stated simply, food is no longer a free commodity—we exchange commodities for commitments, commitments to improve agriculture.

But pressure comes not only from outside. Indeed, it seems that the possibilities of the new agriculture have caused farmers to place unprecedented demands on Asian governments to ensure availability of seeds, fertilizer, and other inputs. In fact, the increasing political muscle that farmers have developed may make the commitments of their governments to farmer-oriented policies and programs essentially irreversible, a marked departure from the years of political neglect.

This new political climate—both international and internal—has led to concrete commitments of budgetary and foreign exchange resources. India increased its budget for agricultural development by more than one-third last year; it is now using the equivalent of one-fifth of its foreign exchange earnings to import fertilizer and fertilizer raw materials.

Turkey's imports of fertilizer and fertilizer raw material may make up the largest single item in overall imports this year, exceeding for the first time petroleum and petroleum products. The availability of fertilizer in Pakistan is twice that of 2 years ago, and several times that of 1960. It is expected to at least double again by 1970.

High prices and new varieties

Among the major forces for agricultural progress in Asia, two stand out: the sharply higher prices for the major Asian food staples (rice and wheat) and some dramatically superior new varieties of wheat, rice, and coarse grains.

Prices of foodgrains, particularly rice, have climbed sharply in many Asian countries as a result of scarcity at home and the disappearance of surpluses abroad. This rise, reflected in prices received at the farm level, has made the use of purchased inputs such as fertilizer much more profitable than heretofore.

Exciting new varieties of rice, wheat, grain sorghum, and corn are now available. In large part, they have been developed at the

This talk by Mr. Brown of the International Agricultural Development Service, U.S. Department of Agriculture, was delivered at the second International Conference on the War on Hunger, Washington, D.C., February 20, 1968.

International Rice Institute in the Philippines and at what is now the International Maize and Wheat Improvement Center in Mexico. The new varieties are much more responsive to fertilizer than traditional varieties. Under proper growing conditions, they outyield traditional varieties not by a mere 10, 20, or 30 percent but by a multiple of 2 or more. This has understandably caught the imagination of many Asian farmers.

The new rice varieties provide a means for tapping some of the vast but largely unrealized food producing potential of the Tropics. At present, rice grown in Temperate Zone countries—for example, the United States, Spain, Italy, Japan, and Australia—yields 4,000-6,000 pounds per acre (rough rice) as contrasted with only 1,000-1,500 in most of the tropical and sub-tropical rice-growing countries. The high yields attainable with the new varieties, coupled with the potential for multiple cropping where water is available, provide some impressive opportunities for expanding the world's food supply.

The spread of new varieties

Use of the new varieties, expanding very rapidly in several Asian countries, is already beginning to have an impact on regional grain production levels. The area planted to improved varieties in Asia this year is estimated at 16 million acres—most of it in India, Pakistan, the Philippines, Afghanistan, and Turkey. The total could expand to 30-35 million acres or more next year.

Improved varieties of wheat and rice have been planted in greatest quantity. India alone has planted about 5 million acres of each. Pakistan has planted approximately 2 million acres of Mexican wheat for harvest this spring, and hopes to plant up to 1 million acres of rice this year. Turkey has nearly 400,000 acres of wheat, and the Philippines perhaps 500,000 acres of rice. In addition, nearly 3 million acres of corn and sorghum have been planted in India.

These planting levels are beginning to represent sizable portions of total acreage. The improved varieties of wheat account for about 15 percent of wheat acreage in both India and Pakistan. Proportions for rice are lower—about 6 percent in both the Philippines and India. Data on the contribution to increased output of the acreage planted to high yielding varieties are not available, but these plantings must have expanded Asia's food grain supply by several million tons.

As improved seed becomes available, the new varieties are often quickly adopted by a relatively small group of farmers—the larger, more commercial farmers who have adequate irrigation and credit. However, the irrigated land suitable to new varieties is limited. And in West Pakistan, for example, lack of farm credit is limiting the distribution of available fertilizer. But these difficulties should not be overestimated since West Pakistan is expected to harvest a wheat crop this spring some 10 percent above the previous record.

The rate of adoption may also be influenced by other factors. Extremely high prices for rice during the past year have stimulated interest in planting improved varieties. As output increases, prices may drop somewhat from present levels—reducing incentives to plant or to carry out essential cultural practices. The increased output can also lead to problems with inadequate marketing facilities.

Much land is not suited to the new varieties now being disseminated. Some farmers, after trying them, will return to the traditional varieties. But the overall trend will be up. And in the short run, food shortages can be alleviated or self-sufficiency obtained with only a portion of total acreage planted to improved varieties. Over the longer run, strong and continuing research and breeding

programs will be necessary to insure steady progress.

The new foodgrain varieties are far more than just another technological breakthrough—they may be to the agricultural revolution in Asia what the steam engine was to the industrial revolution in Europe. In addition to their influence on production, the new varieties are playing a critical role as a catalyst, causing farmers to break with tradition and reconsider their agricultural practices.

It was hoped earlier that fertilizer would perform this function, and it has, to some extent. But traditional varieties are often not responsive enough to fertilizer to provide the readily visible profit peasants need to adopt new practices.

Some of the new varieties—like IR-8 developed at the International Rice Institute—do well even with traditional cultivation methods. But far more than the old rice, IR-8 is responsive to scientific farm management, to far heavier doses of fertilizer, to timely pesticide treatment, to a broad range of improved practices. Not only do farmers learn through experience that the so-called miracle rice works; they learn that it works better if accompanied by generally improved production technology.

The new varieties are requiring a reexamination of existing agricultural policies and development strategies. The new rices grow both during the monsoon and during the dry season, provided, of course, enough water is available. Many traditional varieties, because they are much more photoperiod sensitive and require a longer growing season, are not as adapted to growth during the dry or winter season. Thus, dissemination of the new varieties is often followed by a sharp rise in the index of multiple cropping. In addition, the more intensive use of labor associated with the new varieties, for instance—the new high yielding rice varieties require weeding—is actually resulting in seasonal labor shortages in some rural locales in Asia. Wages paid farm laborers in India's Punjab during the harvest season reportedly exceeded those paid skilled laborers in New Delhi this year.

Accelerating farm mechanization

Among the traditional assumptions concerning agricultural development, those concerning farm mechanization are perhaps most in need of reexamination. Experience with the new rice varieties is demonstrating this need.

IR-8 matures in 120-125 days, as contrasted with 150-155 days for traditional varieties. When planted at the customary times at the beginning of the monsoon, it matures well before the end of the monsoon. Once ripe, it must be harvested quickly, and artificially dried lest it sprout in storage. Traditional rices, maturing after the monsoon, can be harvested in the more leisurely manner and dried in the sun along the roadside. The new varieties then may require, as a minimum, mechanical drying. In many instances, mechanical threshing may also be advisable.

Because IR-8, and most other high yielding rice varieties are quick maturing, it is often possible to plant a second crop of rice before the end of the monsoon. If planted promptly, such a crop can use monsoon rainfall for initial growth, then supplemental irrigation thereafter. But such rapid seedbed preparation may not be possible with bullocks and bullock-drawn equipment. Mechanical power may be required. Similarly, under some conditions tractors must be used for seedbed preparation to realize the full potential of Mexican wheats.

The full potential of the high yielding rices cannot be realized in the absence of careful water management. This requires pumps, engines, and fuel both to move water out of the paddy, when natural rainfall or flooding is excessive, and to move water in, particularly during the dry season when more is needed.

Projections out of date?

As the "agricultural revolution" spreads throughout Asia it is becoming increasingly difficult to project rates and directions of change. Many studies of production and demand for food and the demand for purchased farm inputs have not allowed for the possibility of sharply increased yields due to new technology.

Increased yields may make it possible to halt the trend toward growing food deficits and in some cases reverse it. The Philippines expects to be nearly self-sufficient in rice in a year or so; Turkey may be self-sufficient in wheat shortly thereafter. Pakistan and India are moving rapidly to narrow the gap between food consumption and food production. Other nations, not yet doing as well, are also showing signs of forward progress.

Existing projections for fertilizer demand may require alteration in light of the greater responsiveness of the new varieties to fertilizer. Some projections of fertilizer demand have assumed that the use of one additional pound of fertilizer would yield 10 pounds of additional grain. Available information shows the new varieties have a much higher response coefficient.

In the short run, the greater responsiveness of the new varieties should increase the profitability of fertilizer use and increase the demand for fertilizer above what it would otherwise have been. Over the longer run, however, the demand for fertilizer could be lower than would otherwise have been the case, since a smaller quantity of fertilizer will be required to achieve any given level of foodgrain production. Nonetheless, the developing countries face a continuing fertilizer deficit, requiring increased imports unless the pace of their new plant construction accelerates within the next few years.

The growing demand for irrigation pumps, engines, and tubewells will accelerate in the future as the need for supplemental irrigation and better water management increases. Heavier investment in inputs for a given crop—needed to realize the genetic potential of the new varieties—requires better protection from insects and diseases. A new market for mechanical rice drying equipment is also developing far ahead of the supply.

Closing the protein gap

The remarkable advances in production technology discussed previously should not obscure the recent breakthroughs in food technology which, though not as yet nearly as far along, may in the long run augment current production advances. At the same time as increased yields are making available greater quantities of food, food technologists and private industry are improving food quality through the development and better utilization of low-cost sources of protein.

The problems posed by the shortage of protein in the developing countries is in many ways parallel to the excess calorie problem in the United States. Confronted with the need to reduce the caloric content of diets, food technologists began developing dietetic foods and beverages. A technology evolved to meet a need, a technology which today manufactures and markets more than \$700 million worth of low calorie food products in the United States each year.

In the problem of protein shortage, there are similar elements—a widespread need and a technology evolving in response to this need. There are now indications that a high-protein food industry is emerging to parallel the low calorie food industry.

The conventional means of eliminating deficits of high quality protein has always been to expand production of livestock products. As per capita incomes rise over a long period of time, protein deficiencies in diets disappear, but only at a high cost in terms of grain required. Given the costliness of eliminating pro-

tein deficits using livestock, U.S. food firms are increasingly attracted to the possibility of developing livestock product substitutes from vegetable sources.

Substitute livestock products have developed gradually over the past generation, with the pace accelerating in recent years. The average American now consumes more margarine than butter. Hydrogenated vegetable shortenings have largely replaced lard in our diet.

To date, substitution has been primarily vegetable oils for animal fats, but food firms are now pushing ahead rapidly to develop protein products such as substitutes for milk and meat. Researchers in laboratories of several major U.S. food firms are confident of developing products synthesized from soybeans or other vegetable protein sources which will be virtually indistinguishable from chicken, ham, and beef. One major U.S. food firm is already test marketing a substitute for bacon.

Most hungry countries have indigenous supplies of high quality protein—usually in the form of soybean oil, meal, cottonseed oil meal, peanut oil meal, or copra—which can be used to manufacture high protein foods. These oilmeals are often used for a variety of purposes, including fertilizer, livestock feed, and as export commodities. But some food firms are beginning to incorporate these proteins into imitation or substitute livestock products, beverages, gruels, and breakfast foods, to be marketed commercially. AID is supporting several market surveys and market testing projects by U.S. firms in developing countries.

Recent advances in synthesizing amino acids now make it economically feasible to upgrade cereal protein by adding small quantities of the limiting amino acids. The addition of a few pounds of lysine, costing about \$4, to a ton of wheat raises the quality of wheat protein to a level approaching that of casein, the protein in milk.

With U.S. encouragement, the Indian Government bakeries in Madras and Bombay last month began marketing a lysine-fortified product called Modern Bread. Early reports indicate that it has been selling out every day, and plans are underway to extend lysine-fortification to several other government bakeries, with private bakeries also expressing strong interest.

At present, the use of synthetic amino acids to fortify food is one of the most exciting possibilities available for making substantial inroads against malnutrition. Unlike most other methods of upgrading protein intake, this does not require changes in dietary habits. Over the longer run, it may be possible to achieve the same end by evolving new varieties of cereals which will contain a larger percentage of higher quality protein.

Forward momentum swelling

Exceedingly favorable prices for foodgrains in most Asian countries, coupled with some dramatic new technologies in the form of high yielding varieties of rice, wheat, and coarse grains, are triggering an "agricultural revolution" in Asia.

Many factors will constrain the rate at which the new varieties are disseminated, but it seems quite likely that food production in free Asia will, barring unforeseen circumstances, expand much more rapidly over the next few years than it has thus far during the 1960's.

Years of U.S. assistance, both public and private, coupled with stepped-up efforts by the developing countries themselves, are beginning to pay off. It is essential that we work to maintain and accelerate the forward momentum now developing. If maintained, this momentum greatly enhances the near-term prospects for putting Asian agriculture on a more modern footing—for turning the current advances into a pattern of self-sustaining agricultural growth.

India Moves Closer to Peak Foodgrain Crop

As the 1967-68 season progresses, prospects have become even more certain that India will reap a record foodgrain crop after 2 years of seriously curtailed output because of drought. Good harvests up to now and expectations of more to come have already had an impact on market supplies and prices. In recent months, open market supplies have shown considerable increases, and prices have dropped substantially.

Production this year is unofficially estimated at 97 million metric tons, 67 million of summer grains—rice, corn, sorghum, and millets—and 30 million of winter grains—principally wheat. This compares with the official revised estimate of only 75 million tons in 1966-67. The summer grain harvest is almost complete, while harvesting of the winter grains will begin late this month and continue through early June. If the standing wheat crop is not damaged by unseasonal hails, frost, or rust, the winter grain crop could even exceed 30 million tons. This year's unofficially estimated acreage and production of foodgrains, along with official estimates of last year's, are shown in the following table:

INDIAN FOODGRAIN ACREAGE AND PRODUCTION

Grain	Area		Production	
	1966-67 ¹	1967-68 ²	1966-67 ¹	1967-68 ²
	1,000 acres ³	1,000 acres ³	1,000 metric tons	1,000 metric tons
Wheat	32,457	33,359	11,528	15,000
Barley	7,065	7,413	2,449	2,500
Corn	12,506	12,602	4,991	5,500
Sorghum	44,480	44,725	8,944	10,500
Spiked millet	30,784	30,888	4,503	5,500
Ragi	5,869	6,178	1,600	2,000
Small millets	11,663	11,861	1,671	2,000
Rice, milled	87,963	88,956	30,441	41,000
Total cereal grains ..	232,785	235,981	66,127	84,000
Chickpeas	19,805	20,262	3,612	6,000
Pigeonpeas	6,135	6,178	1,731	2,000
Other pulses	29,059	29,158	3,579	5,000
Total pulses	55,000	55,598	8,922	13,000
Grand total	287,785	291,578	75,049	97,000

¹ Final official estimates, unrevised. ² Unofficial *attaché* estimates.

³ Columns do not add to totals because of rounding.

Favorable weather undoubtedly has been the chief reason for this year's sharp rise in production. During 1967, most parts of the country received well-distributed average to above average rains, and showers in the north during January 1968 stimulated the growth of winter grains.

Other contributing factors include extension of the high-yielding varieties program, larger supplies of fertilizer and pesticides, an increase in double cropping of rice, and a sizable increase in minor irrigation facilities.

The central government, in consultation with the States, set a 1967-68 target of 15 million acres for high-yielding varieties—7.85 million for summer grains and 7.15 million for winter grains. In 1966-67, a total of only 4.82 million acres was planted to both. According to preliminary reports, an estimated 6 million acres were covered with summer grains this year, and the remaining 9 million are believed to have been covered with Mexican wheat and high-yielding varieties of millets and paddy. Implementation of the program has been more systematic and better organized this year than last year when it was initiated. Extension staffs and participating farmers received pre-season training courses, and

supplies of seed, fertilizers, and pesticides were coordinated well in advance.

India may still have to import an estimated (unofficial) 7.5 million tons of foodgrains, including about 6 million of wheat, this year despite its record outturn. This figure represents a decline from earlier estimates, which placed imports at about the 1966-67 level of 9.4 million tons—6.5 million of wheat, 2.1 million of milo, 0.7 million of rice, and 0.1 million of corn. Of last year's total, 73 percent came from the United States—chiefly for rupees under Title I of Public Law 480—12 percent from Canada, 5 percent from Australia, and the remainder from a number of other countries, including the Soviet Union, Burma, and Thailand.

Total stocks of foodgrains in 1967-68—including domestic production, imports, and carryover stocks of 42 million tons—were tentatively estimated at 146.5 million tons. Deducting 9.5 million for seed, feed, and waste and estimated year-end stocks of 50 million, net availability for human consumption comes to 87 million tons. This works out to about 370.4 pounds per person, on a nationwide basis, compared with 337.3 pounds in 1966-67. Of course, availability outside statutorily rationed areas varies widely among States, between rural and urban areas, and with the season.

In the statutorily rationed areas with their 30 million people, foodgrain allocations currently vary from 0.55 to 0.66 pound per day. The government has generally been able to supply the full quantity, but the proportion of wheat and rice has had to be varied according to stocks of these two grains. No free market for rationed grains exists in statutorily rationed areas, and consumers are barred from bringing these grains in from other areas of the country.

The number of informally rationed areas has been reduced in recent weeks with the closure of fair price shops in places where the flow of free market supplies has improved. Currently, these areas cover about 209 million people, and rations vary from 0.22 to 0.70 pound per person.

Open market supplies of foodgrains have increased markedly. During July-October 1967, arrivals of rice in 256 selected markets increased 54 percent over those of the same period in 1966. Arrivals of milo in 181 markets were up 12 percent, of corn in 80 markets up 54 percent, and of wheat in 314 markets up 16 percent during the same 4 months. Foodgrain prices have shown a corresponding decline. During September-December, the price index for all cereal grains dropped about 16 percent. Declines in the indices for individual grains were 17 percent for rice, 8 percent for wheat, 7 percent for milo, 14 percent for millets, and 20 percent for corn.

The increased availability of foodgrains on the open market and the attendant decline in prices have brought demands for withdrawal of rationing and removal of some of the restrictions on trade. Some of the State governments have already begun to reduce their rationing commitments. Nevertheless, the central government will probably proceed with caution in changing its policies, knowing that the flow of supplies to open markets will not be commensurate with the increase in production. A substantial portion of this year's harvest will go toward replenishing inventories at the producer, trade, and consumer levels. Therefore, some sort of public distribution system may still be desirable to meet the needs of poorer people and to build up a government buffer stock.

—Based on dispatch from JAMES H. BOULWARE
U.S. Agricultural Attaché, New Delhi

Secretary Freeman To Head Trade Mission to Top Asian Dollar Markets

Secretary of Agriculture Orville L. Freeman will lead a special trade promotion mission to two leading agricultural dollar markets in Asia from April 3 to 13. The mission is part of a continuing program by USDA and private industry to increase cash purchases of American farm products for a stronger U.S. balance of trade.

The two countries to be visited, Japan and Taiwan, together comprise a booming market for American farm products—\$1.1 billion worth in fiscal year 1967, more than 86 percent in the form of dollar-earning commercial purchases. They are leading buyers in the Far East for U.S. exports of wheat, feedgrains, soybeans, rice, tobacco, cotton, tallow, hides and skins, fruits, vegetables, and poultry.

The trade mission will be made up of Members of Congress, governors from agricultural States, farm organization leaders, and agricultural trade specialists. Wives will accompany some of the mission members.

Personal contacts important

"The purpose of the mission," Secretary Freeman said in his announcement of the tour, "is to establish and strengthen high-level contacts among the government and business leaders in these countries who make the ultimate decisions as to what agricultural products will be imported, how much, and from whom.

"To this basic purpose we are adding a new dimension that we have not had in our trade missions in the past—and this will be the furtherance of direct contacts with consumers, the people who have the ultimate voice as to whether our products will be purchased in the food shops. This responsibility will be carried out by the women members of the mission.

"Government and industry leaders in the Far East too often have had the impression that we Americans are more interested in doing business with Europeans than we are with them. By making our presence felt, at a high level, we intend to show our appreciation of their business and our serious desire to do even more business with them.

"This will be a selling mission—not in the sense of having order books with us but in the sense of selling government, business, and consumer leaders on the desirability of maintaining and expanding their purchases of U.S. farm products."

Competition to sell in the Far Eastern markets is growing daily, according to

Secretary Freeman, and among strong agricultural exporting competitors he named Canada, Australia, New Zealand, Thailand, Argentina, South Africa, and Communist China.

"U.S. exports have become an important part of the income of American farmers. And the dollars these sales bring back are critically important to our country's balance of payments."

Secretary Freeman noted that U.S. agriculture's export earnings have risen so markedly during the 1960's that its net balance-of-trade contribution (the earnings of agricultural exports minus the cost of agricultural imports) is greater than that of any other sector of the economy.

The trade mission's first stop will be Tokyo where Secretary Freeman will open the U.S. Food and Agricultural Exhibition which is being held April 5-21.

The Secretary and other mission members will meet with Japanese leaders in a series of trade conferences in Tokyo. Japanese participants will include government officials, trade association leaders, and food and fiber importers, processors, and distributors.

Women members of the mission will meet with consumer representatives, food editors, and women's organization leaders, will appear on daytime home-and-family television shows that are popular in Japan, and will take part in the opening of American food promotions in some of Tokyo's largest department stores.

Secretary Freeman said that the women members of the group will receive no compensation for their contributions to the mission. They will travel in the mission's chartered plane without charge but will pay for their own meals, hotel expenses, and all other personal costs, he noted.

Governor exchange

After a week in Tokyo, Congressional members of the mission, farm and trade leaders, and five of the State governors will accompany Secretary Freeman on the trip to Taiwan. Five governors will remain in Tokyo to be hosts to a series of trade promotion events featuring U.S. agricultural regions. Ten additional governors who expect to accompany Secretary Freeman only as far as Tokyo will continue on to visit counterpart Japanese prefectural governors as part of a long-established State Department exchange program under which U.S. and Japanese governors have been exchanging visits in alternate years.

Wheat Campaign Begun in Guatemala

Guatemala is launching a campaign to increase consumption of wheat foods with a view toward improving nutrition in the national diet. The country used about 99,000 metric tons of wheat in 1967—two-thirds of it from the United States.

Great Plains Wheat, Inc., FAS cooperator in market development for U.S. wheat, drew up the campaign agreement last month with a Guatemalan wheat millers' organization—Supervisory Association for Purchases of National Wheat and Its In-

dustrial Development. Expenses will be shared equally by GPW and the millers.

At the signing ceremony pictured below, seated from left to right, are: Andre Abrajano, Regional Director in Latin America for Great Plains Wheat, Inc.; José Luis Prado, Association president; and Harry C. Bryan, U.S. Agricultural Attaché. Standing from left to right, are Arturo Gutierrez and Carlos Prado, Association members; and Oscar Lafuente, Agricultural Assistant, Office of the Attaché.



CROPS AND MARKETS SHORTS

Overview of 1967 U.S. Livestock Trade

U.S. exports of livestock and meat products during 1967 were up in all major categories except hides and skins. Exports of live cattle, consisting largely of breeding cattle, rose a strong 56 percent. World demand for U.S. breeding cattle is growing and is

U.S. IMPORTS OF SELECTED LIVESTOCK PRODUCTS
[Product-weight basis]

Commodity	December		Jan.-Dec.	
	1966	1967	1966	1967
Red meats:				
Beef and veal:				
Fresh and frozen:	1,000	1,000	1,000	1,000
Bone-in beef:	pounds	pounds	pounds	pounds
Frozen	398	312	5,207	4,674
Fresh & chilled	647	1,063	15,456	7,029
Boneless beef	58,880	64,942	720,193	814,634
Cuts (prepared)	80	79	1,955	1,170
Veal	2,653	907	22,029	14,244
Canned beef:				
Corned	(1)	5,625	(1)	85,707
Other, incl. sausage	7,102	874	93,583	12,276
Prepared and preserved	2,797	3,162	34,850	39,287
Total beef and veal	72,557	76,964	893,273	979,021
Pork:				
Fresh & frozen	3,925	3,662	41,982	47,391
Canned:				
Hams & shoulders	15,930	23,829	198,231	210,847
Other	4,548	3,675	50,060	40,232
Cured:				
Hams & shoulders	191	123	1,606	1,761
Other	261	333	3,793	4,191
Sausage	310	212	2,677	2,480
Total pork	25,165	31,834	298,349	306,902
Mutton and goat				
Lamb	3,474	5,177	60,550	54,283
Other	619	1,749	14,884	12,267
Other sausage	600	610	5,991	6,227
Total red meat	102,415	116,334	1,273,047	1,358,700
Variety meats				
Wool (clean basis)	340	375	3,332	3,509
Dutiable	10,687	9,685	162,537	109,070
Duty-free	8,619	9,308	114,625	78,206
Total wool	19,306	18,993	277,162	187,276
Hides and skins:				
	1,000	1,000	1,000	1,000
	pieces	pieces	pieces	pieces
Cattle	3	39	221	233
Calf	22	44	242	481
Kip	48	22	438	357
Buffalo	47	52	468	409
Sheep and lamb	980	1,324	27,893	20,344
Goat and kid	364	391	10,331	7,109
Horse	14	44	242	211
Pig	59	114	2,094	1,130
Live cattle²				
	Number	Number	Number	Number
	169,351	138,894	1,100,350	751,835

¹Included in other canned meats. ²Includes cattle for breeding.
U.S. Dept. of Commerce, Bureau of the Census.

expected to continue in 1968. Lard, tallow, and variety meat exports were up 20, 13, and 4 percent respectively, from 1966.

Lingering low world hide prices continue to plague hide and skin exports, and cattle hide exports dropped 17 percent in 1967. Low prices and a reduced demand for mohair caused U.S. mohair exports to decline 3 percent in 1967.

U.S. red meat imports rose 7 percent in 1967. Beef showed the largest increase, with imports up 10 percent from 1966. Pork imports were up 3 percent; lamb was down 18 percent, and mutton and goat, down 10 percent.

Total wool imports, dutiable and duty-free, decreased 32 percent from a year earlier. Hide and skin imports were also down 28 percent.

Live cattle imports—mainly feeder cattle from Mexico and Canada—were off 32 percent from the level in 1966. The largest decline was in imports of Canadian feeder cattle, which declined 51 percent in 1967. Imports from Mexico were down 14 percent from a year earlier.

U.S. EXPORTS OF LIVESTOCK PRODUCTS
[Product-weight basis]

Commodity	December		Jan.-Dec.	
	1966	1967	1966	1967
Animal fats:				
Lard	1,000	1,000	1,000	1,000
	pounds	pounds	pounds	pounds
Lard	13,971	8,106	157,621	185,581
Tallow and greases:				
Inedible	165,020	159,591	1,971,984	2,220,659
Edible	1,701	422	16,438	17,068
Meats:				
Beef and veal	2,569	2,465	28,834	31,249
Pork	5,263	3,979	50,884	50,550
Lamb and mutton	97	313	1,608	1,833
Sausages:				
Except canned	211	230	2,324	2,348
Canned	88	92	1,236	1,164
Other canned meats	744	807	7,889	8,102
Meat specialties				
Frozen	133	258	1,969	2,387
Canned	167	177	1,830	2,319
Total red meats	9,272	8,321	96,574	99,952
Variety meats	13,591	15,495	213,328	222,316
Sausage casings:				
Hog	594	426	6,923	6,224
Other natural	333	158	5,806	4,014
Mohair	1,069	1,816	10,667	10,330
Hides and skins:				
Cattle parts	---	2,886	---	42,451
	1,000	1,000	1,000	1,000
	pieces	pieces	pieces	pieces
Cattle	1,210	837	14,307	11,817
Calf	146	174	2,066	1,906
Kip	33	43	516	477
Sheep and lamb	163	267	2,422	3,758
Horse	2	4	60	59
Goat and kid	50	103	442	355
Live cattle				
	Number	Number	Number	Number
	7,775	6,587	35,357	55,322

Bureau of the Census.

Weekly Report on Rotterdam Grain Prices

Between March 6 and March 13, 1968, offer prices of wheat in Rotterdam generally increased. In the hard wheat sector, Canadian Manitoba was up 5 cents; prices for Russian held firm while U.S. Spring increased 4 cents. U.S. No. 2 Hard Winter, 12 percent, was up 1 cent and Argentine 9 cents, while offers for U.S. Soft Red declined 1 cent.

Argentine corn declined 1 cent per bushel while U.S. remained the same—South African prices were not offered,

A listing of the prices follows:

Item	March 13	March 6	A year Ago
	Dol. per bu.	Dol. per bu.	Dol. per bu.
Wheat:			
Canadian No. 2 Manitoba	2.06	2.01	2.19
USSR 121	1.95	1.95	(1)
U.S. No. 2 Dark Northern Spring, 14 percent	1.96	1.92	2.07
U.S. No. 2 Hard Winter, 12 percent	1.86	1.85	1.98
Argentine	1.89	1.80	1.96
U.S. No. 2 Soft Red Winter	1.75	1.76	1.93
Corn:			
U.S. No. 3 Yellow	1.39	1.39	1.61
Argentine Plate	1.52	1.53	1.62
South African White	(1)	1.44	1.63

¹ Not quoted.

Note: All quotes are c.i.f. Rotterdam and for 30- to 60-day delivery.

U.S. Exports of Soybeans, Oils, and Meals

U.S. exports of soybeans in January totaled 21.8 million bushels, bringing the September-January total to 129.0 million against 127.3 million a year ago. Exports to the EEC reached 52.6 million bushels, 8 percent higher than those of last year. September-January exports to Spain, Denmark, and the Republic of China increased also, while those to Japan and Canada were below last year's level.

January exports of soybean oil totaled 39.5 million pounds, 4 percent less than in January 1967. Cottonseed oil exports, on the other hand, while only 4.5 million pounds, showed a slight gain over last January. The October-January total for soybean and cottonseed oil reached 328.4 million pounds, a 20-percent

U.S. EXPORTS OF SOYBEANS, EDIBLE OILS, OILCAKES AND MEALS

Item and country of destination	Unit	January		September-January	
		1967 ¹	1968 ¹	1966-67 ¹	1967-68 ¹
SOYBEANS					
Belgium	Mil. bu.	.8	.2	4.3	4.3
France	do.	.3	(2)	.9	.4
Germany, W.	do.	1.5	1.8	15.0	16.6
Italy	do.	2.8	2.0	10.0	8.7
Netherlands	do.	2.3	4.0	18.4	22.6
Total EEC	do.	7.7	8.0	48.6	52.6
Japan	do.	6.5	6.3	30.7	29.8
Spain	do.	2.3	3.2	10.2	12.5
Canada	do.	.1	(2)	13.2	11.7
Denmark	do.	1.6	2.1	7.9	8.6
China, Taiwan	do.	.4	.0	2.7	3.6
Others	do.	3.3	2.2	14.0	10.2
Total	do.	21.9	21.8	127.3	129.0
Oil equivalent	Mil. lb.	240.5	239.5	1,397.2	1,416.3
Meal equivalent	1,000 tons	514.8	512.7	2,990.4	3,031.2

EDIBLE OILS

		1967 ¹	1968 ¹	1966-67 ¹	1967-68 ¹
Soybean: ³					
India	Mil. lb.	2.6	4.2	16.0	108.7
Pakistan	do.	.1	.0	.1	37.3
Tunisia	do.	.5	11.4	27.7	35.9
Israel	do.	(4)	.4	11.5	19.3
Dominican Rep. .	do.	.4	4.3	2.7	13.6
Brazil	do.	6.6	2.3	8.8	10.5
Vietnam, South ..	do.	.0	1.6	5.9	9.9
Canada	do.	1.5	1.0	8.4	8.3
Panama	do.	(4)	1.9	4.4	5.4
Haiti	do.	1.2	1.7	4.3	5.3
Others	do.	28.3	10.7	162.3	54.6
Total	do.	41.2	39.5	252.1	308.8
Cottonseed: ³					
Venezuela	do.	2.2	3.1	10.5	14.4
Canada	do.	.7	.7	2.3	2.8
Netherlands	do.	.6	.5	.6	.5
Others	do.	.3	.2	7.9	1.9
Total	do.	3.8	4.5	21.3	19.6
Total oils	do.	45.0	44.0	273.4	328.4

CAKES AND MEALS

Soybean:					
Belgium	1,000 tons	25.2	15.8	73.0	121.0
France	do.	40.8	57.6	148.9	168.9
Germany, W.	do.	33.9	53.8	169.9	211.4
Italy	do.	27.0	4.6	88.9	23.0
Netherlands	do.	27.9	84.7	119.2	189.8
Total EEC	do.	154.8	216.5	599.9	714.1
Canada	do.	14.9	16.0	82.4	77.6
United Kingdom	do.	4.3	10.2	38.0	39.1
Denmark	do.	3.3	12.9	30.5	37.8
Hungary	do.	21.8	12.6	29.9	26.6
Yugoslavia	do.	22.1	.0	47.4	24.8
Others	do.	23.6	29.2	92.6	113.9
Total	do.	244.8	297.4	920.7	1,033.9
Cottonseed:	do.	.1	.1	4.8	1.1
Linseed:	do.	1.2	5.3	61.4	68.5
Total cakes and meals ⁵	do.	247.8	305.0	992.3	1,115.7

¹ Preliminary. ² Less than 50,000 bushels. ³ Includes shipments under P.L.-480 as reported by Census. ⁴ Less than 50,000 pounds. ⁵ Includes peanut cake and meal and small quantities of other cakes and meals.

Compiled from Census records.

increase over the same period last year. All of the gain was in soybean oil shipments under Public Law 480 programs.

Soybean meal exports in January increased 21 percent, reaching 297,400 tons. The October-January total climbed to 1,033,900 tons, 12 percent above last year's. The 714,100 tons exported to the EEC represented almost 70 percent of the total and a gain of 19 percent over last year.

Total cake and meal exports of 1,115,700 tons exceeded last year's total by 12 percent, reflecting the increase in soybean meal exports, as well as some gain in exports of linseed meal.

Sunflowerseed and Oil Imports Up

Preliminary 1967 import statistics for Japan and Western Europe indicate a substantial increase over 1966 in purchases of sunflowerseed and oil. These importations were predominantly from the Soviet Union and Eastern European countries, which altogether account for over 80 percent of the world's production of sunflowerseed.

Reported imports by countries taking appreciable quantities of sunflowerseed and/or oil follow.

IMPORTS OF SUNFLOWERSEED AND SUNFLOWERSEED OIL INTO JAPAN AND WEST EUROPE

Country	Period	1966	1967
		<i>Metric tons</i>	<i>Metric tons</i>
Sunflowerseed:			
Japan	Jan.-Nov.	3,257	81,638
Belgium-Luxembourg	Jan.-Oct.	1,161	2,600
France	Jan.-June	266	233
Germany, West	Jan.-Sept.	11,335	8,796
	(for oil pressing)	6,069	6,313
	(other uses)	5,267	2,482
Italy	Jan.-Oct.	117,910 ¹	160,143
Netherlands	Jan.-Dec.	1,268	1,399
Sunflowerseed oil:			
Belgium-Luxembourg	Jan.-Oct.	8,994	13,440
France	Jan.-June	3,283	910
Germany, West	Jan.-Sept.	73,652	104,708
Italy	Jan.-Oct.	2,576 ¹	20,048
Netherlands	Jan.-Dec.	16,137	49,342
Austria	Jan.-June	13,555	22,374
United Kingdom	Jan.-Dec.	5,120	38,529

¹ January-November

Compiled from official and other sources.

Spain Buying More U.S. Soybeans

Spain's imports of soybeans, nearly all supplied by the United States, increased from 340,000 metric tons in 1965 and almost 640,000 in 1966 to slightly over 810,000 in 1967. The increased emphasis on livestock and poultry production, necessary to reduce imports of meats, meat preparations, and dairy products (amounting to about \$115 million both in 1966 and 1967) would seem to indicate that Spain will continue to import in large quantity.

Greek Tobacco Exports During 1967

Greek exports of oriental leaf tobacco in 1967 totaled 178.0 million pounds, almost equal to the record 178.4 million shipped out in 1966.

Much larger shipments to the United States last year offset a drop in West Germany's purchases. Exports to EEC countries (including West Germany) totaled 66.2 million pounds in 1967, compared with 87.3 million in 1966. Exports to the Soviet Union and other Soviet-oriented countries last year were 34.5 million pounds, against 38.1 million in 1966.

GREEK EXPORTS OF ORIENTAL LEAF

Destination	1966 ¹	1967 ¹
	<i>1,000 pounds</i>	<i>1,000 pounds</i>
United States	28,110	50,512
Germany, West	64,638	41,905
Soviet Union	14,762	14,134
France	10,292	11,714
Poland	7,625	7,435
Italy	6,555	7,243
Japan	5,199	7,109
Egypt	4,641	6,430
Czechoslovakia	6,143	5,327
Belgium	4,219	4,494
Germany, East	4,852	4,376
Switzerland	1,655	2,648
Israel	1,878	1,725
Finland	1,597	1,523
Others	16,257	11,469
Total	178,423	178,044

¹ Preliminary.

Tobacco Intelligence, London

Vanilla Export Quota Set

The Malagasy Republic, including the Comoro Islands and Reunion, have allocated a vanilla bean export quota of 755 metric tons for shipment to the United States and Canada during 1968 and a quota of 330 tons for European destinations. The U.S.-Canadian quota is broken down into segments, of which 355 tons are allotted for shipment during the first half of 1968 and the remaining 400 tons during the balance of the year.

Producers have announced price increases of between \$0.50 and \$1.00 per kilogram, depending on quality, over the \$10.20 per kilo rate agreed upon under the 1967 quota arrangement. Producers will also guarantee the new prices through the end of the year, and if the 1968 quota is met renewal is assured.

Current New York Spot Bourbon vanilla prices are being quoted at \$5.50-5.75 per pound, up from \$5.20-5.50 per pound prior to the price increase stipulated in the new quota agreement.

Australian Canned Fruit Export Prices

The Australian Canned Fruits Board has announced the following 1968 minimum price schedule for canned fruit sales to continental Europe. Promotional allowances are 22 cents per case of 2-1/2's and 10's and 11 cents per case of No. 1's on shipments from Australia before June 30, 1968.

Item	Choice		Standard
	Heavy syrup	Light syrup	Light syrup
	<i>U.S. dol. per doz.</i>	<i>U.S. dol. per doz.</i>	<i>U.S. dol. per doz.</i>
Apricots:			
2 1/2	2.91	2.84	—
No. 1	1.88	1.84	—
10	2.56	2.49	—
Peaches:			
2 1/2	2.91	2.84	2.75
No. 1	1.94	1.91	1.88
10	2.74	2.66	2.66
Pears:			
2 1/2	3.19	3.12	3.05
No. 1	2.05	2.02	—
10	2.80	2.74	2.66
Two fruits:			
2 1/2	3.05	2.98	—
No. 1	1.94	1.91	—
10	2.74	2.66	—
Fruit cocktail:			
2 1/2	3.68	—	3.61
No. 1	2.30	—	2.22
10	3.26	—	3.12

¹ C & F main European ports.

Crops and Markets Index

Fats, Oilseeds, and Oils

14 U.S. Exports of Soybeans, Oils, and Meals

14 Sunflowerseed and Oil Imports Up

15 Spain Buying More Soybeans

Fruits, Vegetables, and Nuts

15 Australian Canned Fruit Export Prices

Grains, Feeds, Pulses, and Seeds

14 Weekly Report on Rotterdam Grain Prices

Livestock and Meat Products

13 Overview of 1967 U.S. Livestock Trade

Sugar, Fibers, and Tropical Products

15 Malagasy Vanilla Export Quota Set

Tobacco

15 Greek Tobacco Exports During 1967

OFFICIAL BUSINESS

UN07196 AL10001BB2PI 4SB CC01
USDA NAT AGR LIB BELTSVILLE
BR
PLANT INDUS STA
BELTSVILLE MD 20705

To change your address or stop mailing,
tear off this sheet and send to Foreign
Agricultural Service, U.S. Dept. of Agriculture,
Rm. 5918, Washington, D.C. 20250.

Independence for Mauritius, Indian Ocean Sugar Isle

Mauritius, which became independent of Britain on March 12, is one of the smallest of the world's new nations; together with its dependency Rodrigues, it has an area about equal to Rhode Island's. Yet it ranks as Africa's second biggest producer and exporter of sugar. Its sugar exports, which averaged around 550,000 short tons in 1960-64, have risen to over 620,000 in more recent years. Most of this sugar is sold under the Commonwealth Sugar Agreement, to the United Kingdom (75 percent of the 1966 exports) and Canada (20 percent); but Mauritius also has a sugar quota of about 17,000 tons in the United States. It is expected to remain a member of the Commonwealth, with which it has close ties—both economic and otherwise.

This picturesque island lies in the Indian Ocean about 1,000 miles off the east coast of Africa. With few natural resources other than its volcanic soil, it depends heavily upon its sugar industry. Sugar provides nearly all the gross per capita income, estimated at \$240 to \$280 per annum. Sugar and industrial molasses account for 99 percent of Mauritius' exports. The sugar crop varies, however, with the quantity and distribution of the Indian Ocean monsoon rains and with the damage done by the cyclones that afflict the island from time to time. The current sugar crop is estimated at 675,000 tons.

Between 35 and 40 percent of the country's food requirements, including all the rice it consumes, must be imported; there is little arable land remaining for the expansion of either sugar or food crops. There has been some successful interplanting of white potatoes among young cane; and a new crop—onions—has been established on Rodrigues by the Mauritius Agricultural Marketing Board, with a production of 700 to 800 tons.

Complex history creates complex society

The present population of the island (approaching 800,000 and growing rapidly, with a density of over 300 per square mile) reflects some of the waves of influence and immigration that have washed over it since its discovery by Dutch navigators in the late 16th century. About half of its citizens are Indian Hindus and another 20 percent, Indian Muslims. It has also about 215,000 Creoles of mixed African and European descent; 10,000 Franco-Mauritians (descended from early French settlers) some 25,000 Chinese; and smaller numbers of British and other Europeans.

Uninhabited before the Dutch sailors landed in 1598, Mauritius was the home of the near-legendary dodo—a great awkward bird which, having no natural enemies, had lost the power of flight. The arrival of the first Dutch colonists in 1638 with their domestic animals doomed the dodo to extinction.

But the Dutch colonies, despite the introduction of sugarcane from Batavia, fared no better than the dodo, and by 1710 Mauritius had been abandoned to the pirates of the Indian Ocean. Colonized in 1722 by the French and renamed Ile de France, it prospered with the introduction of cassava as a staple crop and the development of the dominant sugar industry. After the Napoleonic wars, it was ceded to the British, who developed it further, introducing workers from India as indentured labor on the cane plantations after freeing the African slaves.

Modern problems and potential

Despite its overpopulation and its complexity of cultures, Mauritius moves into independence with one basic advantage—an already existent framework of self-government. For a number of years it has had its own cabinet ministers and legislative body, ministry of agriculture, department of cooperatives, modern research stations for sugar, tea, and tobacco, Sugar Board, and marketing organizations. Its cooperative organizations recently celebrated their 50th anniversary, and a few years ago its sugar research station was the site of an international sugar technology conference. Some of its sugar specialists are at work both in Australia and in some of the new African countries where sugarmills and plantations have been established.

Although it is remote, Mauritius is situated on several international airlines connecting it to South Africa, Australia, Madagascar, East Africa, and Europe. And, with its beautiful beaches, its deep-sea fishing, and the peculiar charm of its old plantation houses, it has the potential for expanded tourist trade. Some believe also that Mauritius, with the high literacy rate of its large and varied population plus its hydroelectric power possibilities, could become a labor-intensive manufacturing center. Much will depend upon its future political stability and its ability to attract and retain labor-intensive industries and to develop the inherent local skills.

—ROBERT C. MONCURE

Foreign Regional Analysis Division, ERS (ret.)